BREEZE
DIGITAL SIGNAGE

# Breeze Digital Signage Six-Head Player Installation Guide

Version 1.4

January 2015

# Installation Notes

## VERY IMPORTANT!!

**Please read this IMPORTANT NOTE before installing!!**

The video card software used in the six-head Breeze player combines all connected monitors into a single desktop. The player then utilizes this desktop to show the playlist in the correct dimensions across the monitors.

In order for the software and hardware to work together correctly, all of the monitors (or TV screens) must be the same brand and the same model number.

In addition, all of the monitors connected to a six-head player must be in the same orientation, either landscape or portrait.



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# Support and Resources

## Technical

Technical support is included at no charge. Questions or issues can be submitted by phone, e-mail and chat to **Keywest Technology** technical support.

**Contact information:**

- **Phone**: 1-800-331-2019, Option #2
- **E-mail**: tech@keywesttechnology.com
- **Chat**: live chat assistance at: http://www.breezedigitalsignage.com/support
- **TotalCARE HelpDesk**: Login to access the **Knowledgebase** and submit service tickets: http://helpdesk.keywesttechnology.com/

## Documentation

**Getting Started with Breeze (Brief):**

http://helpdesk.keywesttechnology.com/index.php?/Knowledgebase/Article/View/124/0/getting-started-with-breeze

**Breeze Documentation (Full):**

http://helpdesk.keywesttechnology.com/index.php?/Knowledgebase/Article/View/167/0/breeze-documentation

## Training Videos

http://www.breezedigitalsignage.com/tutorials/

***Note:*** While the documentation and training videos were designed for the standard **Breeze Player**, the same functions apply to the 6-head **Breeze Player** as well.



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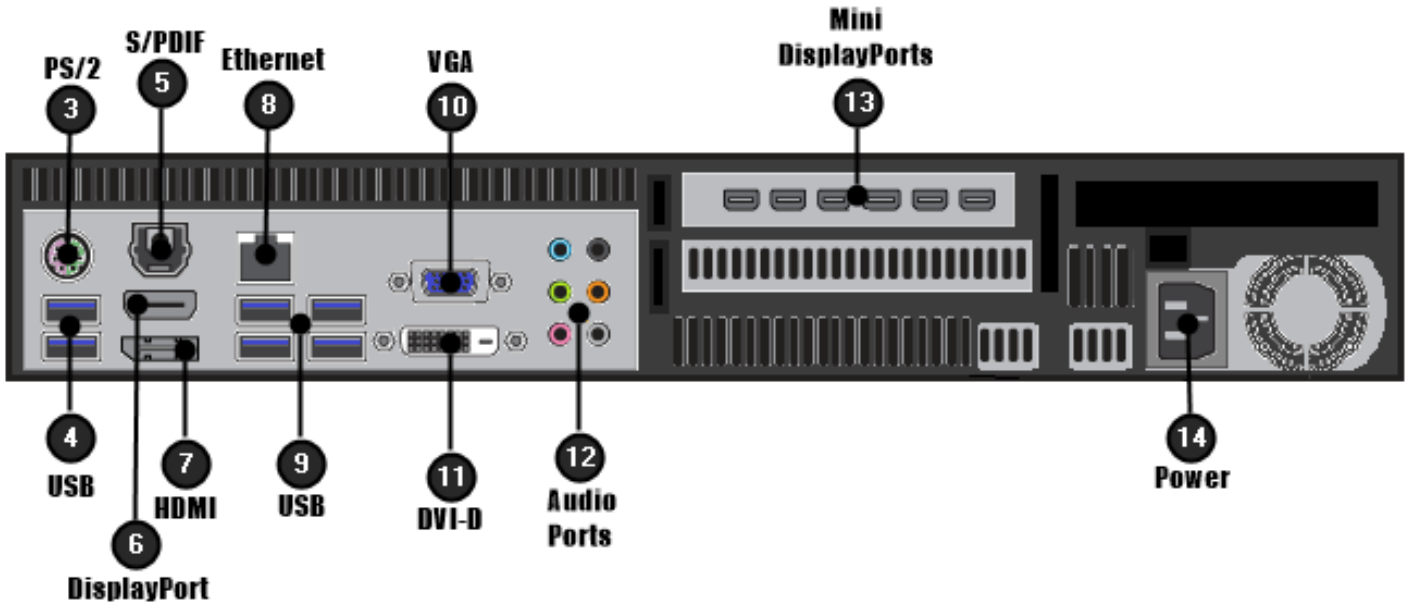
# Hardware

## Player Front

## Player Back




## Player Accessories

Your **Breeze Player** will include the following accessories.

1. Power cord (1)
2. Mini DisplayPort Adapters (6)



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## Physical Connections

**Connecting monitors to the Breeze Player:**

1. Connect the mini DisplayPort adapter to the back of the **Breeze Player** (#13).
2. Connect the appropriate cable to the other end of the adapter.
3. Connect the cable to the display monitor or TV screen being used.
4. Repeat the above steps for each monitor or TV screen.
5. Other video ports (such as #6, #7, #10, #11) should NOT BE USED!!

**Other Necessary Connections:**

Ethernet:

6. Connect the Ethernet cable to the Ethernet input (#8) on the **Breeze Player**.

Power**:**

7. Plug one end of the power cord into a 110-V electrical outlet and the other end into the **Breeze Player** (#14).

**Optional Connection:**

Speakers**:**

8. Connect the audio cables from the display monitor or TV to the speaker output (#12) on the **Breeze Player**. The color of the jack refers to the function of the connector:

   *Green – Line out*: Used as a connector for speakers or headphones.

   *Black – RS-Out*: Rear surround sound line out in 4 /5.1 /7.1 channel mode.
   *Orange – CS-Out*: Center/ subwoofer line out in 5.1 /7.1 channel mode.
   *Gray – SS-Out*: Side surround sound line out in 7.1 channel mode.
   *Pink – Microphone*: Used as a connector for a microphone.
   *Blue – Line in:* Used for connecting external audio outputting devices.



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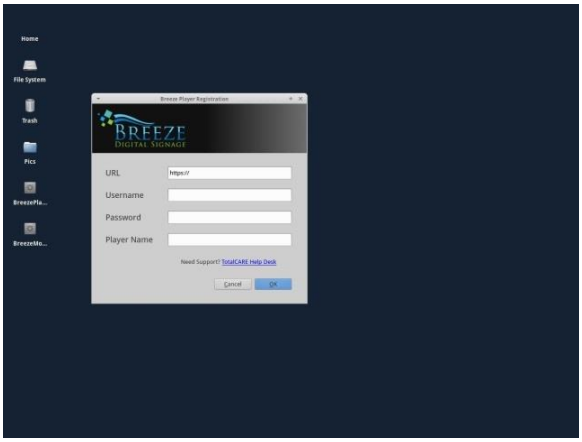
# Connect to a Breeze Server

## Player Registration

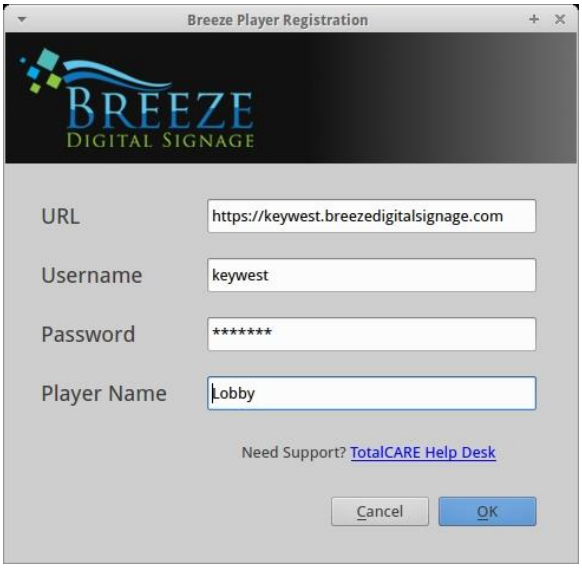
Your player must be registered to communicate with and receive playlists from a **Breeze** server.



**Player Registration:**

The **Breeze Player** connects to a **Breeze** server using the server's sub domain.

1. Enter your **Breeze** server's sub domain in the URL field.
2. Username and Password correspond to the supplied credentials that are used to login to the **Breeze** server.
3. **Player Name** is the name the player has in the **Players** tool webpage. It is recommended that a player be named according to its location when employing players in several different areas.



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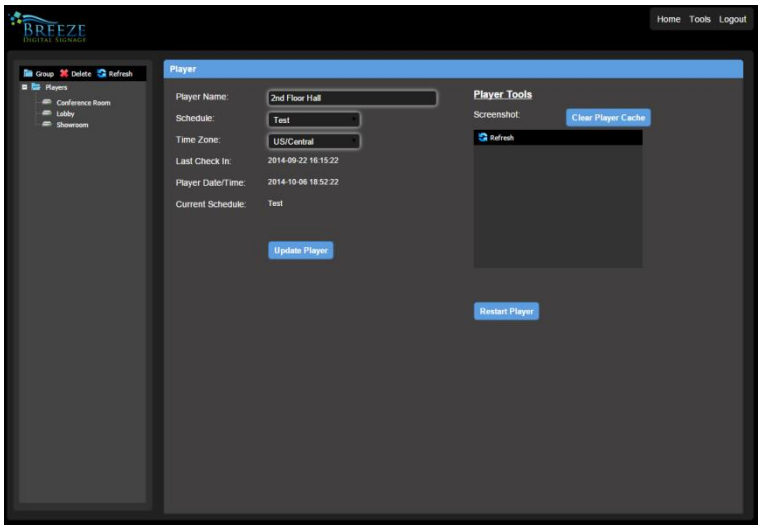
***Note:*** The player will begin playing once it is registered; until a playlist is sent, the screens will appear black.

**Players Tool:**

The **Players** tool in the **Breeze** server webpage is where users can interface with the player device.

1. Go to the **Players** tool on the **Breeze** server webpage.
2. The newly added player is now visible in the **Players** page.




*Note*: If the **Players** tool is open when the player is added, the player cannot be seen until the page is refreshed. A refresh button is included in the **Players** page toolbar for convenience.



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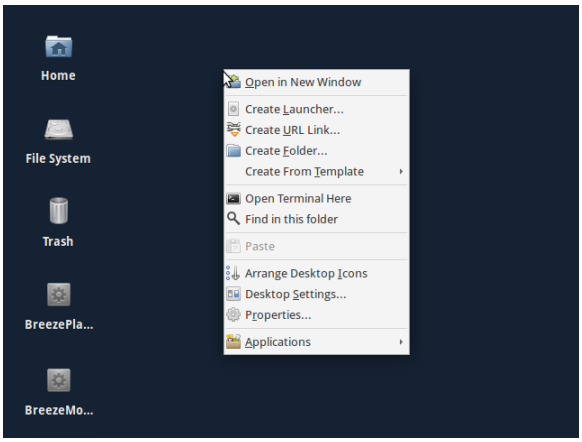
## Network Connections

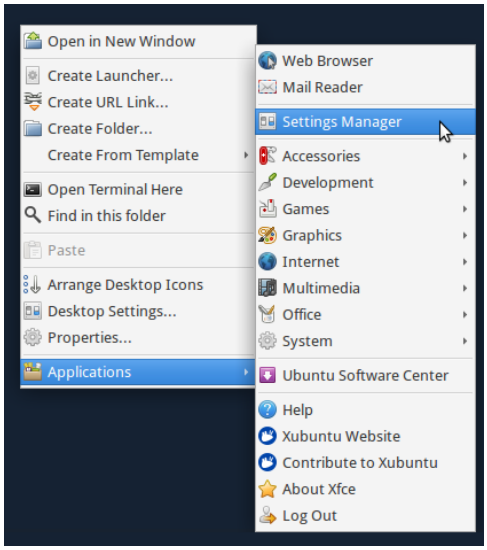
Out of the box, the **Breeze Player** is configured to use DHCP and will automatically obtain an IP address. If the player does not automatically obtain an IP address, please contact your network administrator. A static IP address can be assigned to a connection using the following steps.

**Assigning a static IP address:**

1. Right-click on the desktop to open a quick-access menu.




2. Hovering on the **Applications** selection opens a second menu list. From this menu, choose the **Settings Manager**.



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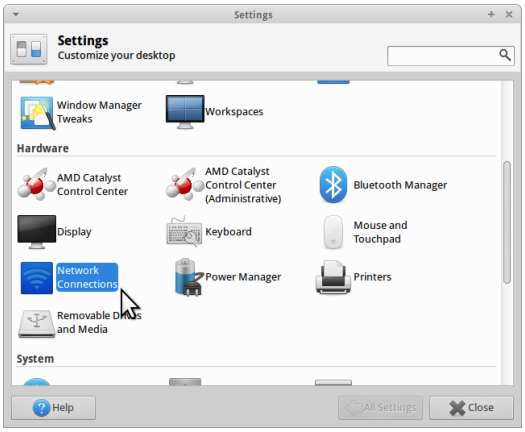
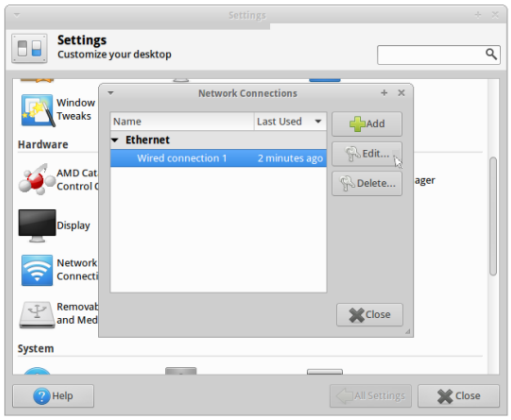
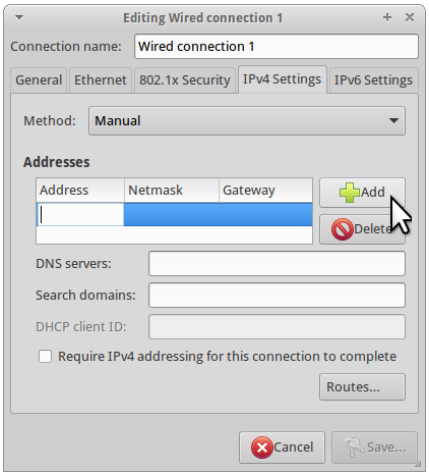
3. Scroll down in the **Settings Manager** until the **Network Connections** icon is visible. Double-click on it to open.




4. In the **Network Connections** tab, select **'Wired connection'** and click on the **Edit** button.




5. Click on the **IPv4** tab and select **Manual** from the **Method** drop down menu.
6. To input your TCP/IP settings, click the **Add** button. DNS Servers should be separated by a comma and no spaces. Click the **Save** button to apply the changes.



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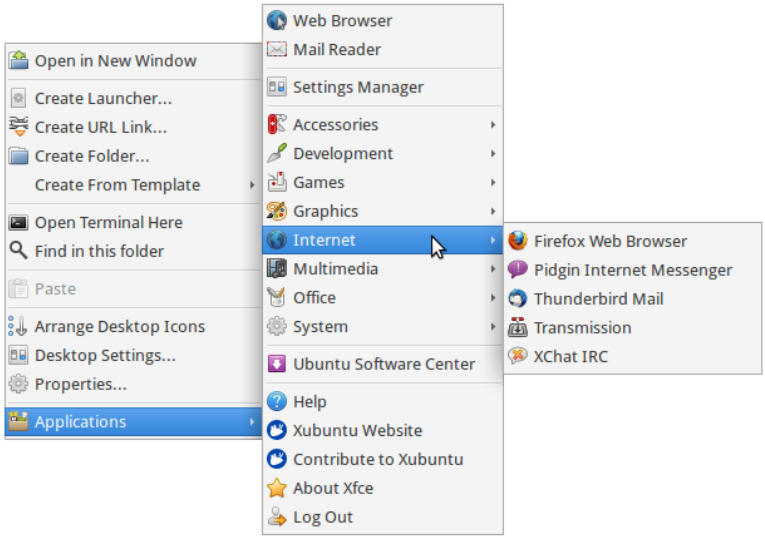
## Confirm Internet Connectivity

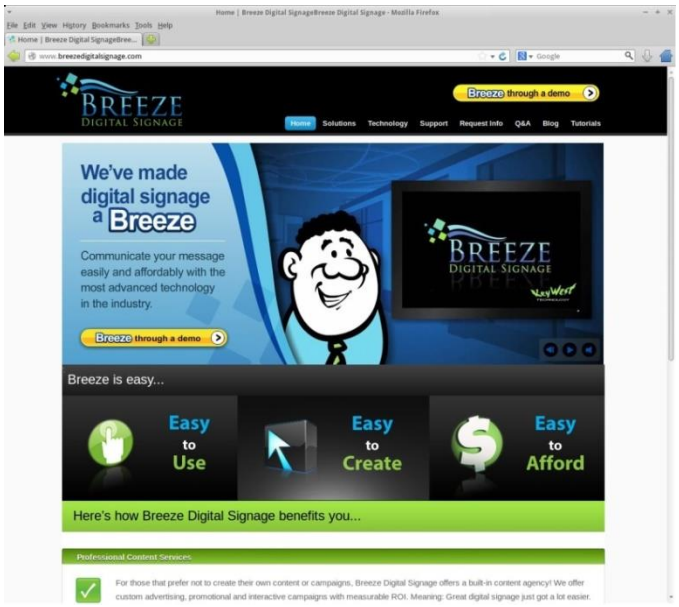
Once your player is connected to an Internet connection, you can use the **Mozilla Firefox** web browser to confirm Internet connectivity.

### Opening Firefox:

1. Right-click on the desktop.
2. Choose Internet from the menu selections
3. Click on the **Firefox Web Browser** menu selection.




4. Open a web page to verify connectivity.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We've made digital signage a Breeze
Communicate your message easily and affordably with the most advanced technology in the industry.
Breeze is easy...
Easy to Use
Easy to Create
Easy to Afford
Here's how Breeze Digital Signage benefits you...



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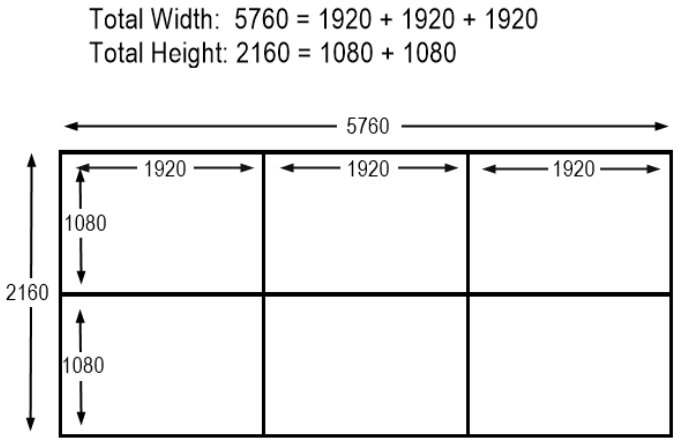
# Total Resolution

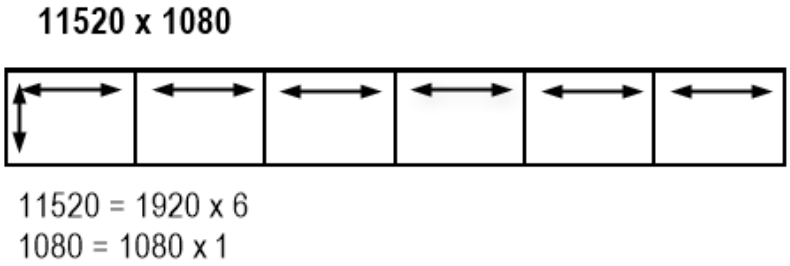
The six-head player requires additional configurations to set the resolution of the combined monitors in the **Breeze Editor** and on the **Breeze Player**.

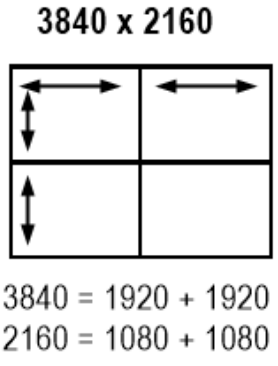
**Calculating the Total Resolution:**

Total resolution is the sum of the dimensions (width and height) of all monitors in each direction. By default, a **Breeze Player's** resolution is set to a 3 x 2 layout using 1920 x 1080 resolution monitors. This results in a total resolution of 5760 x 2160. The image below illustrates how the default total resolution is calculated.




The dimensions for any layout can be configured using the same method. The following are some examples of other common layouts using monitors with a resolution of 1920 x 1080.




***Note*:** Keywest Support can assist in calculating your specific total resolution if needed.



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# Editor Resolution and Layout

Typically, media content on a video wall is arranged in one of two approaches:

- combining all monitors to display one image or video
- displaying different media content on each monitor

Both approaches may be utilized in one playlist if desired.

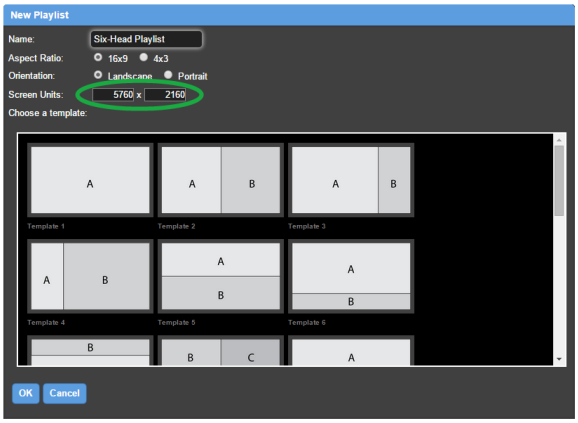
***Note***: This installation guide covers **Breeze Editor** functions specific to the 6-head **Breeze Player** only. **Breeze Documentation** addresses all functions of the **Breeze Editor**:

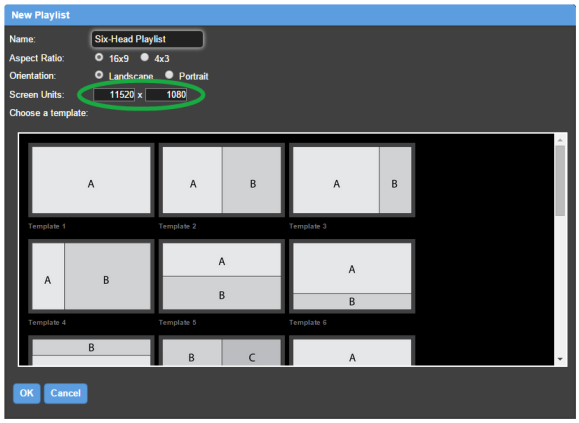
http://helpdesk.keywesttechnology.com/index.php?/Knowledgebase/Article/View/167/2/breeze-documentation

## Editor Resolution

The canvas area of the **Breeze Editor** sizes to match the resolution specified by a user when a new playlist is created. The resolution is set to 1920 x 1080 by default, but a custom resolution may be set using the **Screen Units** fields in the **New Playlist** dialog box.

Regardless of how the monitors are combined to show media, the total resolution must be communicated to a **Breeze Editor** so the canvas area can be sized appropriately. Please refer to the previous section for information on calculating total resolution.




**Setting Resolution in the Editor:**

1. Select **New Playlist** in the **Breeze Editor**.
2. Enter the total resolution in the **Screen Units** fields of the **New Playlist** dialog box. The left field is the width and the right field is the height.
3. Do not choose a template when entering custom screen units. (All templates use a total resolution of 1920 x 1080.)



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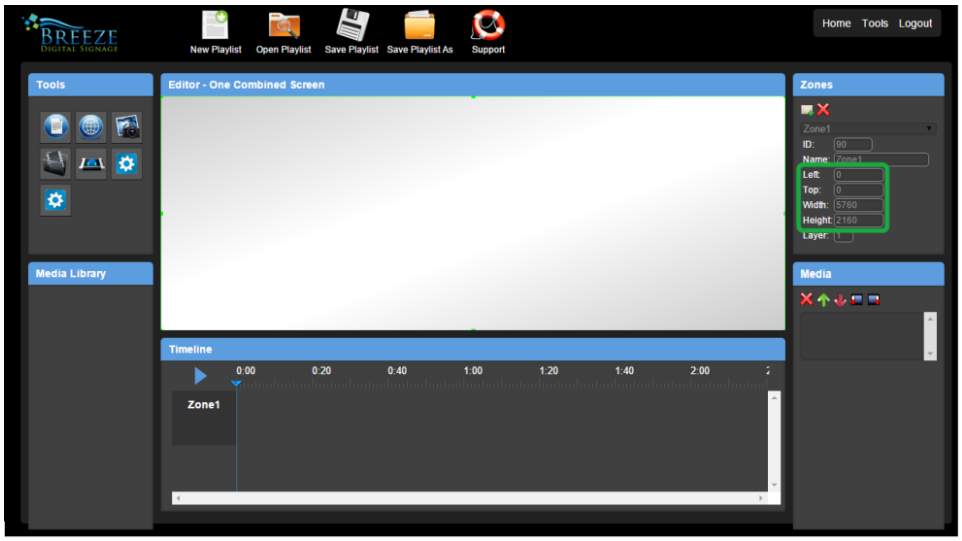
## Editor Layout

Zones hold the media content in a playlist, and it is the zones which determine where media content shows on the video wall.

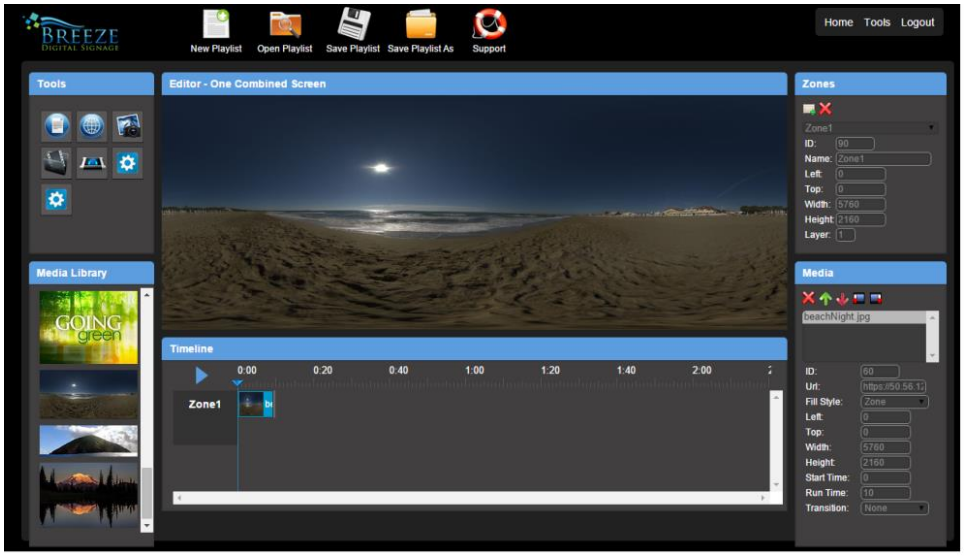
### Combining into One Display:

To create one large display that shows one image or video across all of the monitors, one full screen sized zone must be created in the **Breeze Editor**. This zone will be the same size as the total resolution.

1. Add a new zone, and set the **Left** and **Top** fields in the **Zones** area to zero.
2. Set the width and height to the width and height of the total resolution.




Once this playlist reaches the player, specialized video card software will divide the media content into appropriate portions for each monitor.



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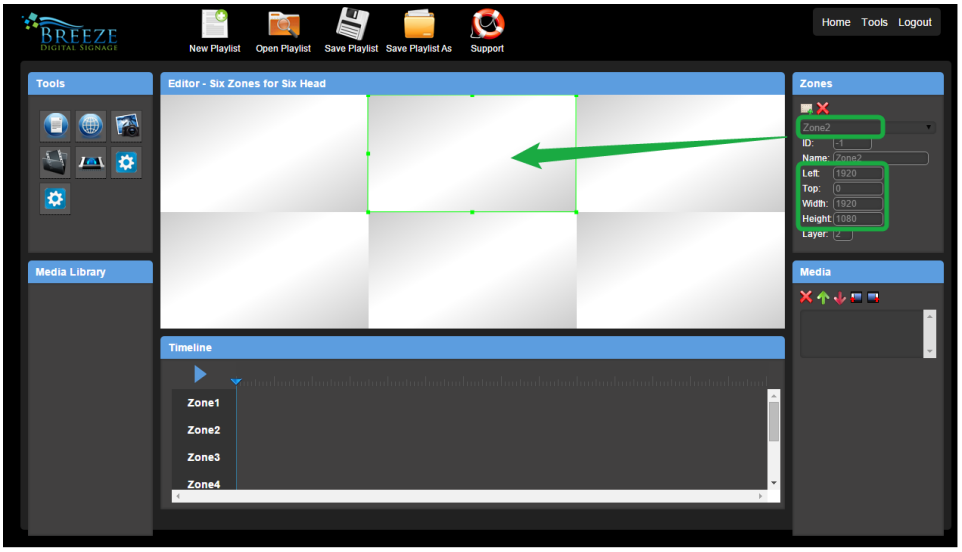
**Different Media on Each Monitor:**

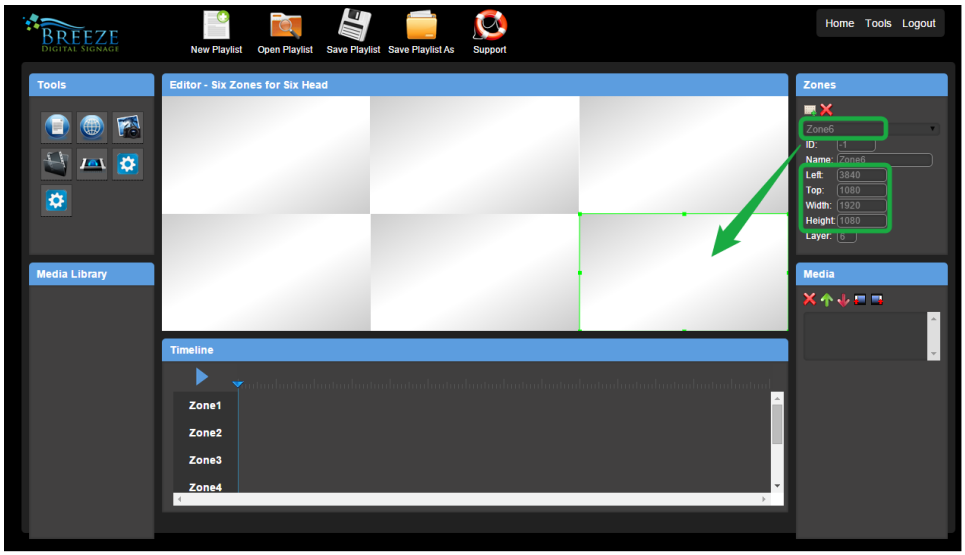
To display different media content on each monitor, a zone must be created for each monitor. The zone size will be the same dimensions as a single monitor's resolution.

For example, when the default resolution configuration is utilized, six zones must be created in the **Breeze Editor**.

The default configuration refers to the resolution set in the displayinfo file on the **Breeze Player** by default (see pages 17 & 18). It is six monitors in a 3 x 2 layout with resolutions of 1920 x 1080 each. This results in a total resolution of 5760 x 2160.




Each zone has a width of 1920 and a height of 1080. Zone 2 is offset 1920 from the left, zone 3 is offset from the left 3840 (1920 x 2), and zone 6 is offset 3840 from the left and 1080 from the top.



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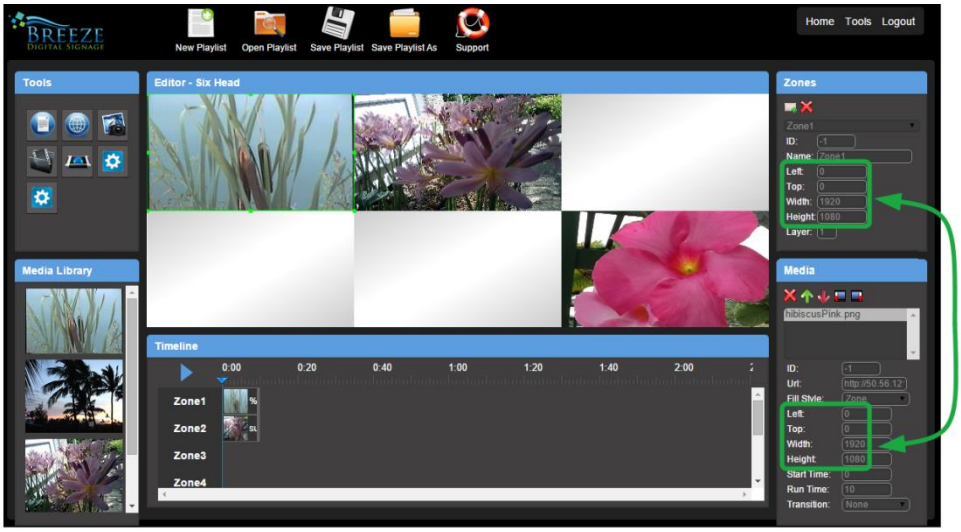
**Create a Playlist Layout which Shows Different Media on Each Monitor:**

1. Add a new zone and set the **Left** and Top fields to zero. Set the **Width** field to 1920 and the **Height** field to 1080.
2. Add another new zone and set the Left field to 1920 and the **Top** field to zero. Set the **Width** field to 1920 and the **Height** field to 1080.
3. Add a 3rd new zone and set the **Left** field to 3840 and the **Top** field to zero. Set the **Width** field to 1920 and the **Height** field to 1080.
4. Add a 4th new zone and set the **Left** field to zero and the **Top** field to 1080. Set the **Width** field to 1920 and the **Height** field to 1080.
5. Add a 5th new zone and set the **Left** field to 1920 and the **Top** field to 1080. Set the **Width** field to 1920 and the **Height** field to 1080.
6. Add a 6th new zone and set the **Left** field to 3840 and the **Top** field to 1080. Set the **Width** field to 1920 and the **Height** field to 1080.




***Note***: Once media has been added to a zone, the **Media** area will also contain **Left**, **Top**, **Width**, and **Height** fields. The **Media** area is empty until a media item is added to the playlist; designing the zone layout before adding any media to the playlist will limit the **Left**, **Top**, **Width**, and **Height** fields to just one set, in the **Zones** area.



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# Player Resolution

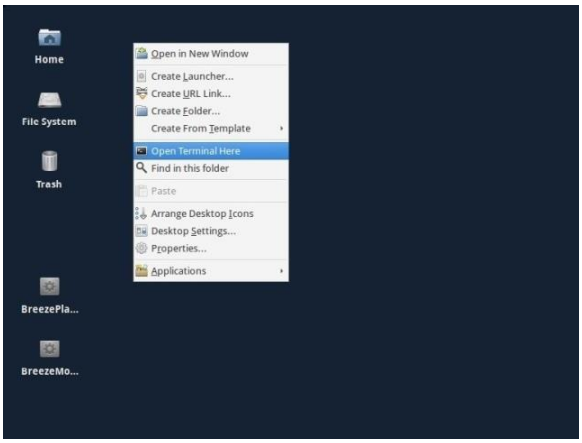
## Breeze Player Display Info File Configurations

The **Xinerama** program is designed to work with the video card to combine all monitors connected to the card into a single desktop. The player utilizes this desktop to show the playlist in the correct dimensions across all monitors. The total resolution must also be entered in a **Breeze Player** configuration file.

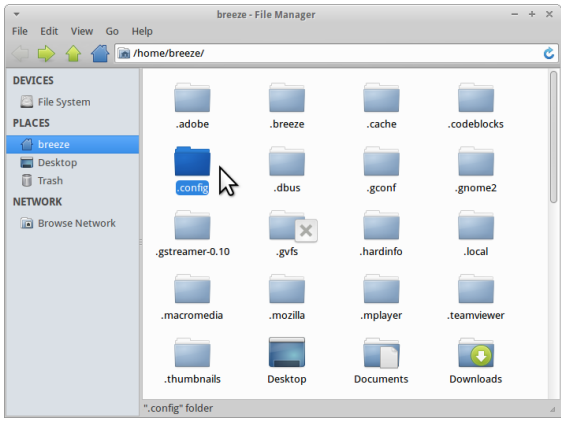
### Setting Resolution in the displayinfo file:

The total resolution of all the monitors must be entered in the **Breeze Player** configuration file named **displayinfo**. The file path is **/home/breeze/.config/breeze**.

1. Right-click on the **Home** folder on the desktop and select open.




2. In the **File Manager** window, double-click to open the **.config** folder.



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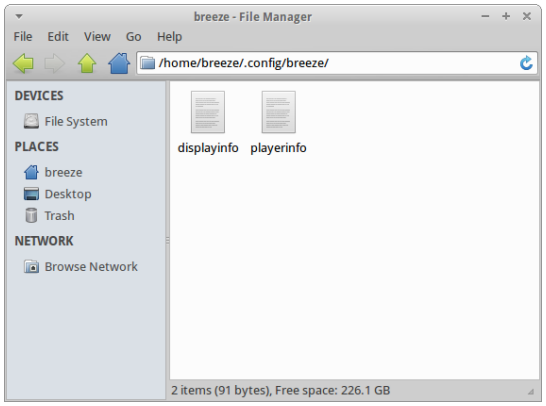
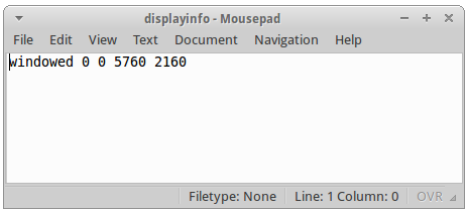
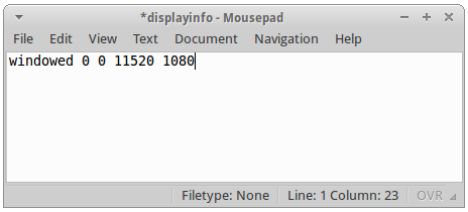
3. In the .**config** folder window, open the **breeze** folder. This is where the **displayinfo** file is located. Double-click on the **displayinfo** file to open.



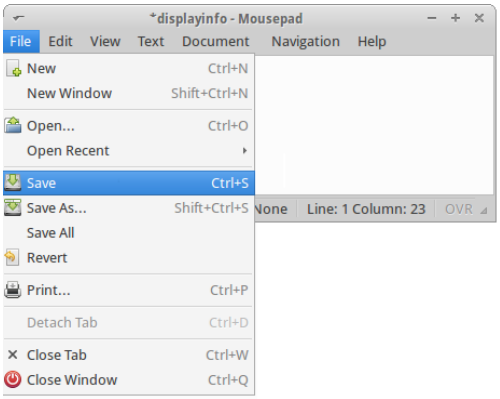

4. The first two numbers in the **displayinfo** file are 0 and 0. They represent the resolution placement from the top left corner. The third and fourth numbers indicate the width and height of the total resolution to the player.


displayinfo - Mousepad
File Edit View Text Document Navigation Help
windowed 0 0 5760 2160
Filetype: None Line: 1 Column: 0 OVR

5. Change the third entry to the total width, and the fourth to the total height.


*displayinfo - Mousepad
File Edit View Text Document Navigation Help
windowed 0 0 11520 1080
Filetype: None Line: 1 Column: 23 OVR

6. Save this file to update the player configuration.



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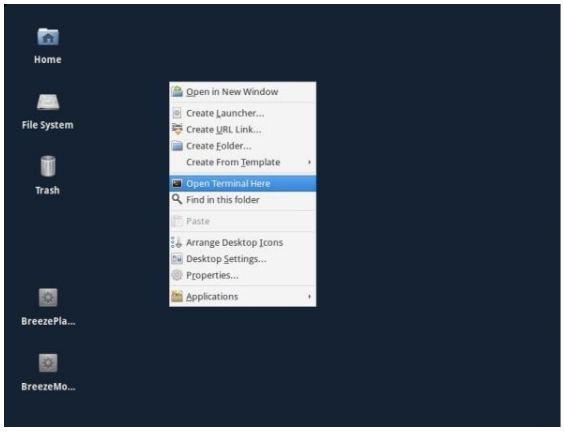
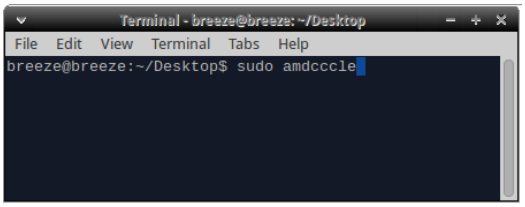
## Xinerama and the Display Manager

### Accessing Xinerama:

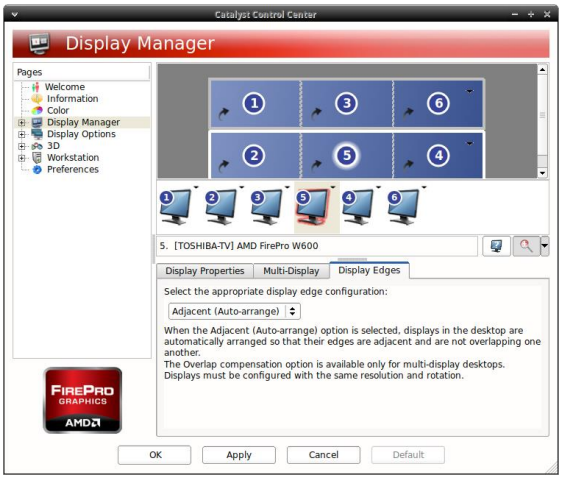
1. **Xinerama** is accessed and configured in the **Catalyst Control Center with Administrative privileges**, which will need to be opened through the command line. Right-click on the desktop to open a terminal window.




2. At the command line, type '**sudo amdcccle'**.




3. You will then be prompted for a password. The default password is '**keywest'**.
4. The **Catalyst Control Center** opens with administrator privileges enabled. (Expand **Display Options** to locate **Xinerama**.)



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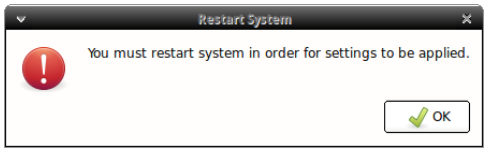
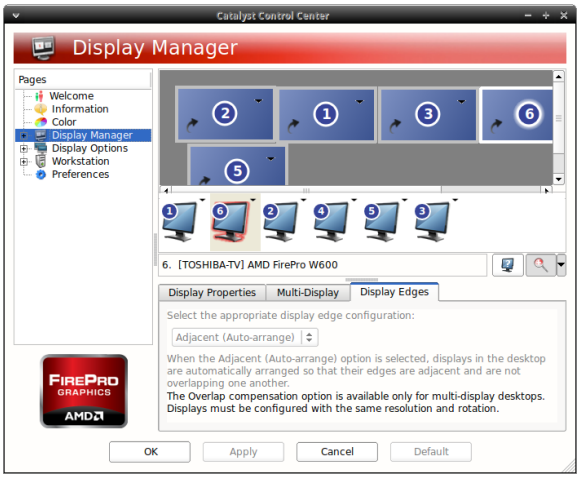
**Configuring the Monitor Layout:**

1. To configure the monitors' layout, **Xinerama** must be disabled. This is done by removing the check in the **Xinerama** checkbox and clicking **Apply**.

2. After **Xinerama** is disabled, the system warns it must be rebooted.




3. After rebooting the player, the **Catalyst Control Center** will need to be re-opened using the command line. Repeat the steps in the 'Accessing **Xinerama'** section on the previous page.
4. In the **Catalyst Control Center**, select the **Display Manager**.



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5. The **Display Manager** is used to communicate the physical layout of the monitors to the video card software. Once the **Display Manager** is open, red boxes with numbers will appear in the upper left corner of all connected monitors.

6. These numbers correspond to the numbers of each display pictured in the **Display Manager**. The screen numbers on the display screens may not be in any logical order.

7. Each monitor must be defined as either a single display desktop or a multi-display desktop. A single display desktop is selected for lead displays, or any monitor that is at the beginning of a new row. There are two methods to set the display type: click on the small arrow next to the monitor tab or select the **Multi-Display** tab.

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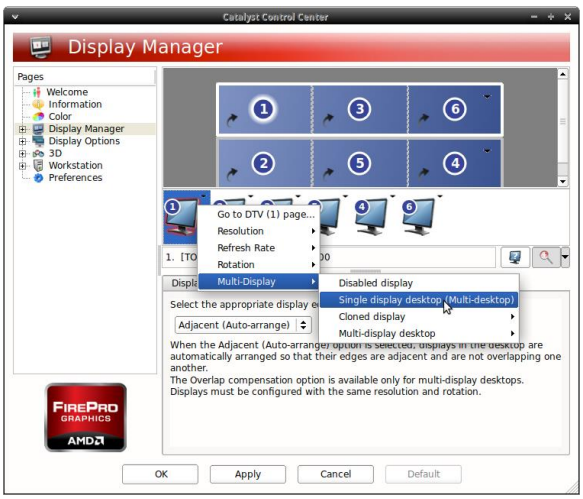
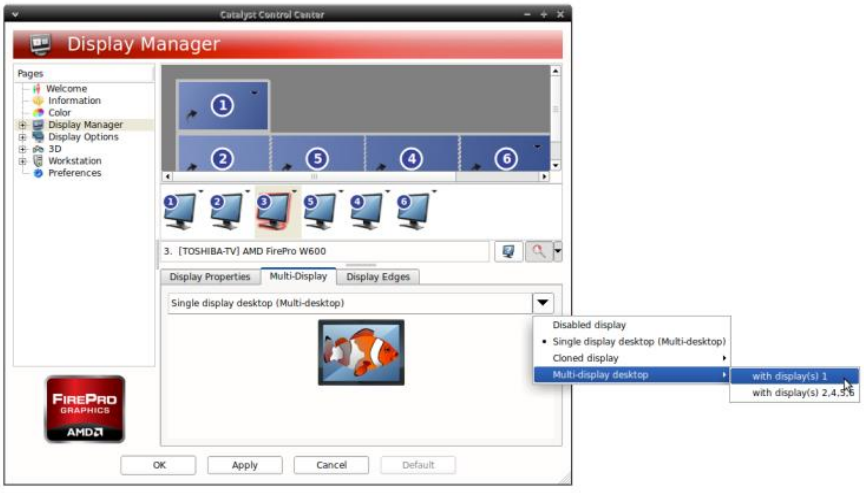
8. To begin, click on the monitor number that will be the lead monitor in the top row. Set this monitor to a **Single display desktop (Multi-desktop).**



9. Each monitor in a row with that ('lead') monitor can now be added as a multi-display desktop, and grouped with the single display 'lead' monitor. As monitors are added to the group they will also show as part of the group in the drop down selection list.




10. The monitor at the beginning of each row will need to be added as a lead, or '**Single display desktop (Multi-desktop)**'. All other monitors in the row are added to the lead monitor group, corresponding to the row the monitor is in. If the physical layout of the monitors is one row, then only one **Single display desktop** is needed.



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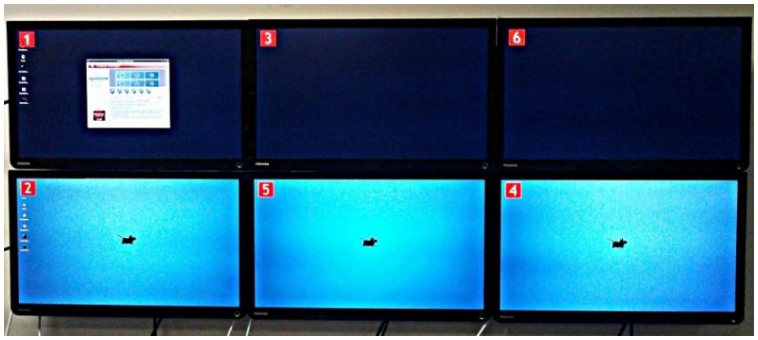
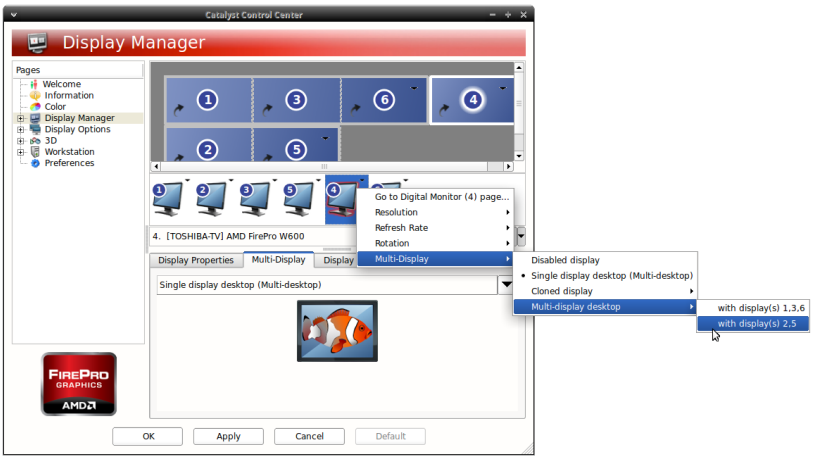
11. In the example, two single displays are needed since there are two rows. The first **Single display desktop** is the monitor the **Display Manager** labeled #1. The monitors in the row with #1 (#3 and #6) need to be added as **Multi-display desktops** and linked with #1.




12. The monitor the **Display Manager** labeled #2 will also need to be a **Single display desktop**, monitors in the row with #2 (#5 and #4) need to be added as **Multi-display desktops** and linked with #2.



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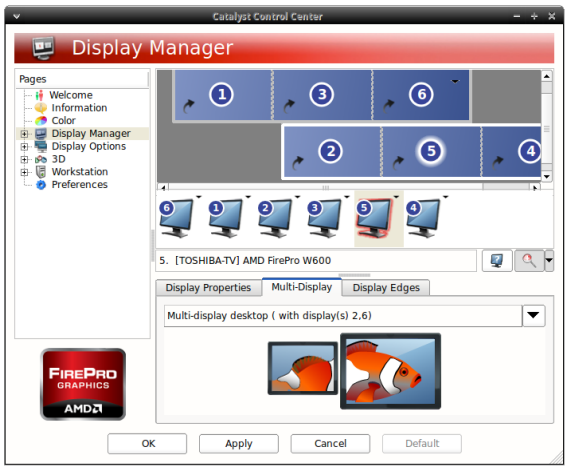
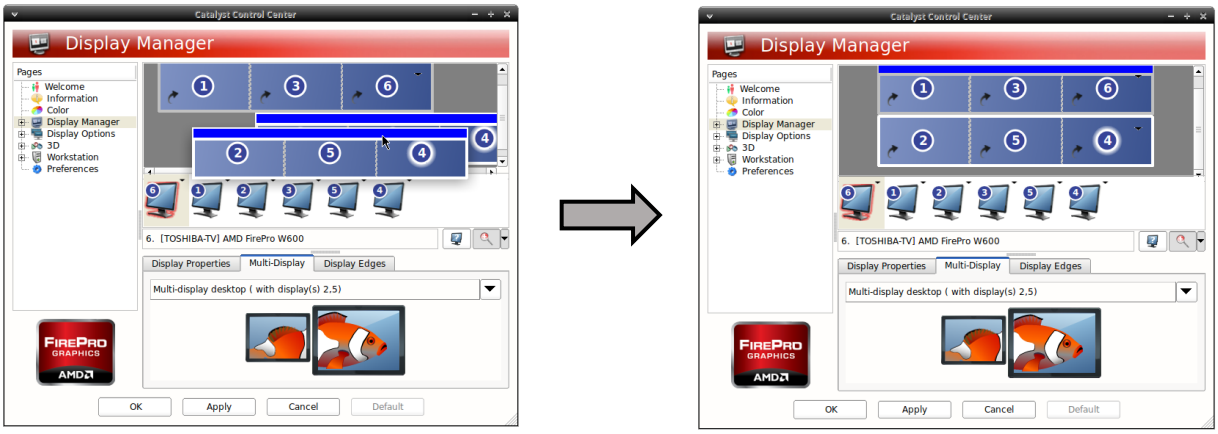
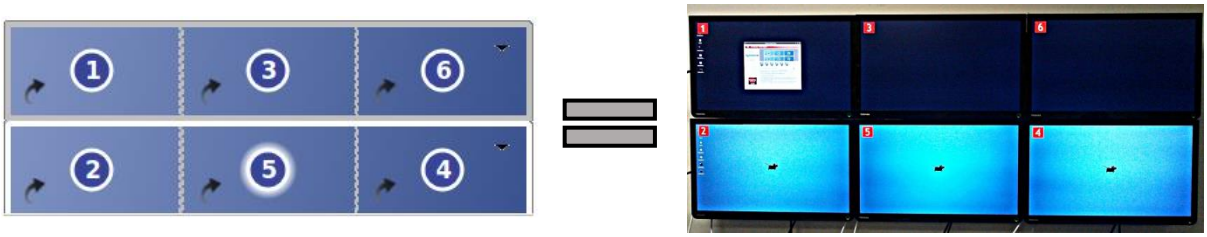
Once the two groups (top row and bottom row) have been formed, they must be aligned vertically.




13. Clicking towards the top of a group reveals a blue bar connecting the grouped monitors. Click and hold on this bar to move the second group under the first group, to mimic the physical monitor layout.




14. When the monitor layout in the **Display Manager** matches the physical layout of the monitors, click the **Apply** button.



15. **Xinerama** must be re-enabled. This will require another reboot of the player.



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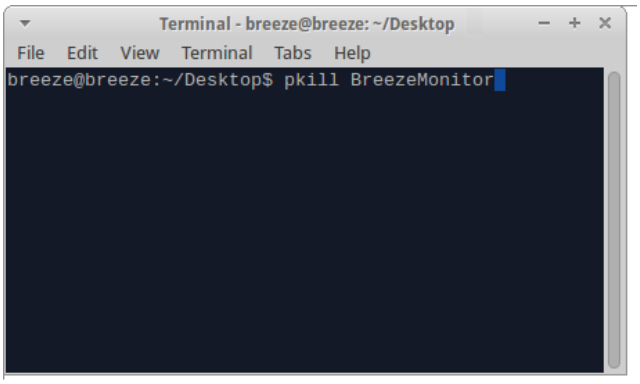
# Other Player Functions

## Stop & Restart Breeze Player

To stop the **Breeze Player** software, you will need to connect a mouse and keyboard to the player or establish a remote connection to the player.

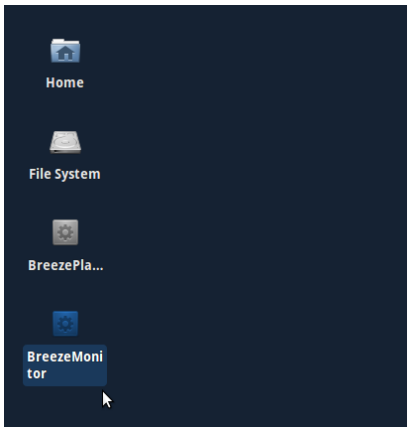
**Stopping the Breeze Player software:**

1. To stop the **Breeze Player** software, click the **Escape** key on your keyboard. Once the **Breeze Player** software has stopped, the **BreezeMonitor** will also need stopped to prevent the player software from restarting automatically.
2. Right-click on the player desktop.
3. Within the Terminal window, type the command pkill BreezeMonitor and press the Enter key.




**Restarting the Breeze Player software:**

1. To restart the **Breeze player** software, double click the **BreezeMonitor** desktop icon.



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